

SOME PLANT SYMPTOMS ASSOCIATED WITH
APHELENCHOIDES SPP. IN FLORIDA

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Historical

Nematodes of the genus Aphelenchoides have been recognized to cause economic plant loss since the 1890's. Damage caused by the nematode to ornamental plants is listed in some early references and is often observed on plant leaves or developing buds. Hence, species of Aphelenchoides are commonly called foliar or bud nematodes. Damage caused by these nematodes to ornamental plants most often occurs as irregular leaf lesions.

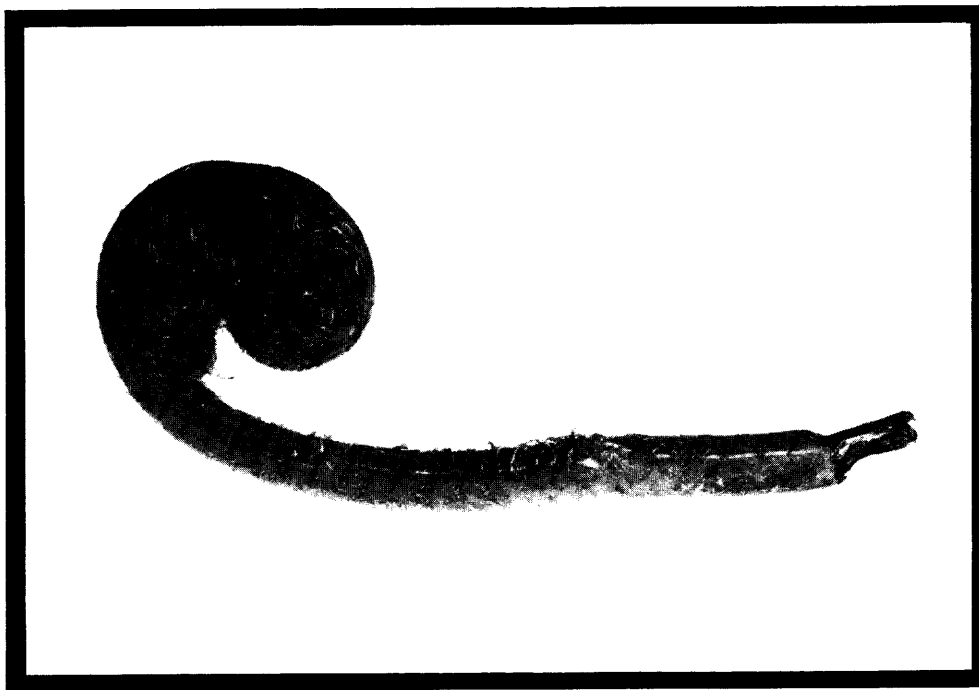


Fig. 1. Tree fern damaged by Aphelenchoides fragariae.

Species in Florida

Some species of Aphelenchoides are obligate plant parasites, but most are fungus-feeders (mycophageous). Presently, 3 species, A. fragariae (Ritzema Bos, 1891) Christie, 1932, A. ritzema-bosi (Schwartz, 1911) Steiner, 1932, and A. besseyi Christie, 1942, are recognized as infecting ornamental plants in Florida.

Injury Caused by Foliar Nematodes to Ornamental Plants

Injury to plants associated with foliar nematodes in Florida is normally expressed as one of the following: 1) discolored lesions on plant foliage; 2) abnormal development of flower and/or leaf buds; or 3) stem galls. Symptoms of foliar nematode damage to ornamental plants in Florida occur most often as leaf lesions or bud abnormalities. Until recently, stem galls have not been found associated with any species of Aphelenchoides.

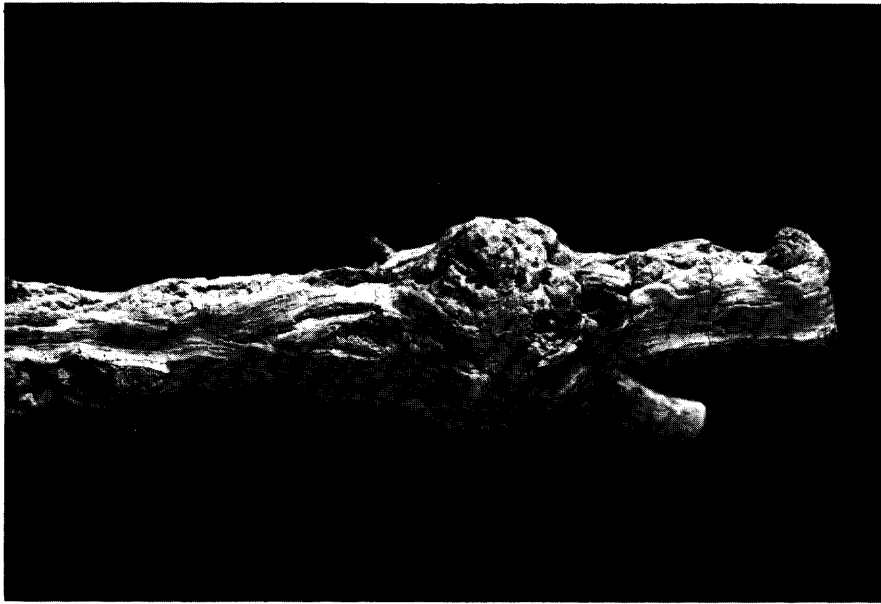


Fig. 2. Stem galls of jasmine from which Aphelenchoides besseyi were recovered.

Hosts of Rare Occurrence

Fronds of the tree fern, Sphaeropteris cooperi (F. J. Muell.) Tryon, when infected with Aphelenchoides fragariae, may become noticeably deformed and may cease normal development. This nematode can incite severe deformity of fern fronds by feeding as an ectoparasite (fig. 1).

Galled stems (fig. 2) collected from Jasminum volubile Jacq. were found to have large numbers of A. besseyi present, exclusive of any other plant pathogens. Symptoms occurred on stems approximately the thickness of a pencil, and this apparently is the first report of A. besseyi associated with such plant damage.

References

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